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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,295	02/26/2002	Yun-Peng Zhu	0072-IS	5339
7590	04/09/2004		EXAMINER	
Michael P. Dilworth CROMPTON CORPORATION Benson Road Middlebury, CT 06749				BOYER, CHARLES I
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/082,295	ZHU ET AL.
	<b>Examiner</b> Charles I Boyer	<b>Art Unit</b> 1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 26 February 2002.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-6 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 04/05/04.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the specific ethoxylated glycidyl ethers of the present specification, does not reasonably provide enablement for the tens of thousands of possible compounds encompassed by the formula for the compound of the present claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The examiner notes that these compounds may be quaternary ammonium, primary, secondary, or tertiary amines. Furthermore, as R1 and R5 encompass a wide range of compounds, the examiner reiterates there are at least tens of thousands of compounds which may be described by the formula of the present claims.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Before citing the references against the present claims, the examiner would like to state for the record that due to the inordinate breadth of the present claims, claiming such a broadly defined compound, the examiner maintains that a thorough search is impossible. As stated above, there are thousands of possible compounds which may be described by the formula of claim 1. The examiner has taken into consideration the present invention as a whole, in order to identify the closest prior art, which art is cited below. Applicants should be aware however, that there are many other references that could have been cited against the present invention. Any response from applicants to the references cited below that does not also address the fact that their claims are extremely broadly written, together with a clear statement of what applicants consider to be the novelty of their invention, would likely not be successful in rendering those claims allowable.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmolka, US 4,490,279.

Schmolka teaches high foaming surfactants for use in bar soaps, shampoos, dishwashing detergents, etc. (see abstract).

The surfactants of the invention are amine oxide compounds which satisfy the formula of present claim 1 (col. 1, line 45). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Schleusener, US 5,494,593.

Schleusener teaches surfactants for use in detergent compositions (see abstract).

The surfactants of the invention are amphoteric compounds which satisfy the formula of present claim 1 (col. 17, example 1). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kucharski, Polish Journal of Chemistry.

Kucharsky teaches the synthesis of compounds, one of the reactants of which satisfies the formula of present claim 1 (page 1, formula 1). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following Chemical Abstract Registration Numbers represent a small sampling from a limited search of the compounds encompassed by the formula of present claim 1.

6200-40-4	219527-85-2	76145-03-4
236429-42-8	209046-75-3	76145-05-6
236429-44-0	209046-77-5	184004-50-0

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236429-46-2	209046-78-6	184167-90-6
236429-48-4	13393-70-9	179073-55-3
236429-49-5	76145-02-3	179073-69-9

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles I Boyer whose telephone number is 571 272 1311. The examiner can normally be reached on M-F 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571 272 1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles I Boyer  
Primary Examiner  
Art Unit 1751